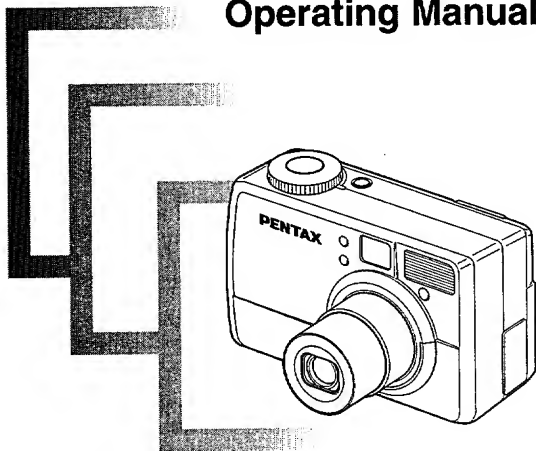


PENTAX™

Digital Camera

Optio 430

Operating Manual



To ensure the best performance from your camera, please read the Operating Manual before using the camera.

Thank you for buying the Pentax Optio 430 Digital Camera. Please read this manual before using the camera in order to get the most out of all the features and functions. Keep this manual safe, as it can be a valuable tool in helping you to understand all the camera's capabilities.

Regarding copyrights

Images taken using the Optio 430 that are for anything other than personal enjoyment cannot be used without permission according to the rights as specified in the Copyright Act. Please take care, as there are even cases where limitations are placed on taking pictures even for personal enjoyment during demonstrations, industrial enterprise or as items for display. Images taken with the purpose of obtaining copyrights also cannot be used outside the scope of use of the copyright as laid out in the Copyright Act, and care should be taken here also.

Regarding trademarks

- CompactFlash and CF are trademarks of SanDisk Corporation.
- PENTAX is a trademark of Asahi Optical Co., Ltd.
- Optio is a trademark of Asahi Optical Co., Ltd.
- All other brands or product names are trademarks or registered trademarks of their respective companies.
- The USB driver uses software developed by Phoenix Technologies Ltd.
Compatibility Software Copyright © 1997 Phoenix Technologies Ltd., All Rights Reserved.
- PRINT Image Matching is a term for the print command that is embedded in the header file of the image created by Digital Camera. It contains color setting and image parameter information.
- PRINT Image Matching Version 1.0. Copyright 2001 Seiko Epson Corporation. All Rights Reserved.
- PRINT Image Matching is a trademark of Seiko Epson Corporation.
- The PRINT Image Matching logo is a trademark of Seiko Epson Corporation.

To users of this camera

- There is a possibility that recorded data may be erased or that the camera may not function correctly when used in surroundings such as installations generating strong electromagnetic radiation or magnetic fields.
- The liquid crystal panel used in the LCD display is manufactured using extremely high precision technology. Although the level of functioning pixels is 99.99% or better, you should be aware that 0.01% of fewer of the pixels may not illuminate or may illuminate when they should not. However, this has no effect on the recorded image.
- There is a possibility that the illustrations and the display screen of the LCD monitor in this manual are different from the actual product.

FOR SAFE USE OF YOUR CAMERA

Sufficient attention has been paid to the safety of this product but please pay particular attention to the warnings indicated by the following symbols during use.



Warning These symbols indicate that it is possible that the user may experience serious difficulties if the warnings are not heeded.



Caution These symbols indicate that it is possible that the user may experience minor or middling difficulties or physical difficulties if the warnings are not heeded.



Warning:

- Do not attempt to take the camera apart or remodel the camera. High voltages are present within the camera, and there is therefore a danger of electric shocks.
- If the inside of the camera should become exposed as a result of, for example, the camera being dropped, please do not under any circumstances touch such exposed portions, as there is a danger of receiving an electric shock.
- Wrapping the strap of the camera around your neck is also dangerous, and please take care that small children do not hang the strap around their necks.
- Use an AC adapter and Battery charger that are of the power and voltage specified for exclusive use with this product. The use of an AC adapter other than that specified exclusively for use with this product may cause fire or electric shocks.
- Discontinue use of the AC adapter during thunderstorms. This can cause a fire or electrical shock.



Caution:

- Do not attempt to touch the product, should the product catch fire due to a battery short, etc, and do not attempt to disassemble or charge the battery at such times, as there is a danger of the product bursting into flames.
- On the other hand, should the camera battery explode or start smoking, extract the battery as soon as possible, taking great care not to get burnt at such times.
- Some portions of the camera heat up during use, so please take care, as there is a risk of low temperature burns if such portions are held for long periods of time.

Care to be Taken During Handling

- Do not clean the product with organic solvents such as thinner or alcohol benzene.
- Places of high temperature and humidity should be avoided. Particular care should be taken regarding vehicles, which can become very hot inside.
- Storing the camera where pesticides and chemicals are handled should be avoided. Remove from case and store in a well-ventilated place to prevent the camera from becoming moldy during storage.
- Do not use the camera where it may come in contact with rain, water or any other liquid, because the camera is not weather, water, or liquid resistant. Should the camera get wet from rain, splashing water, or any other liquid, wipe it off immediately with a dry soft cloth.
- Ensure that the camera is not subjected to substantial vibrations, shocks or pressure. Place the camera on a cushion for protection when the camera is subjected to the vibrations of a motorbike, car, or ship, etc.
- The liquid crystal display will become black at temperatures of approximately 60°C but will return to normal when normal temperatures are returned to.
- The display response speed of the liquid crystal becomes slow at low temperatures but this is due to the properties of the liquid crystal and is not a fault.
- Remove dust from the lens viewfinder using a blower or clean off dust using a lens brush.
- Periodic checks are recommended every 1 to 2 years in order to maintain high-performance.
- When the camera has not been used for a long time, please, without fail, try out the camera to confirm that it is still working properly, particularly prior to taking important pictures (such as at a wedding or during travelling). No guarantee can be given with regards to collateral damage (costs incurred as a result of taking pictures, loss of benefits that were to be obtained through taking pictures) that may cause this product to fail.
- If the camera is subjected to rapid temperature changes, drops of water appear on the inside and outside of the camera. Therefore put the camera in a bag or plastic bag, and take the camera out when the difference in temperature has subsided.
- The temperature range in which the camera can be used is 0°C to 40°C.
- Take care to ensure that garbage, dirt, sand, dust, water, toxic gases, salt, etc. do not enter within the camera, as this may cause the camera to become damaged. If rain or drops of water get onto the camera, please wipe dry.
- Please refer to "Precautions When Using a CF Card" (p.15) regarding the CompactFlash CF card.

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Contents of the Operating Manual

This Operating manual contains the following chapters.

● Getting Started

This chapter explains what you need to do after purchasing the camera before you start taking pictures. Be sure to read it and follow the instructions.

● Quick Start

This chapter explains the simplest way to take pictures and play back images. Use it if you want to start taking pictures straightaway.

● Common Operations

This chapter explains common operations such as the functions of the mode dial and buttons, and how to use the menus. For more details, refer to the respective [Taking Pictures], [Playback/Erasing] and [Settings] chapters.

● Taking Pictures

This chapter explains the various ways of capturing images and how to set the relevant functions.

● Playback/Erasing

This chapter explains how to play back images on the camera or on a TV and how to delete images.




● Settings

This chapter explains how to set the camera-related functions.

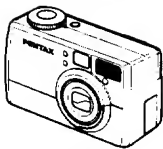
● Appendix

This tells you about the messages displayed on the LCD monitor and what to do in the event of trouble.

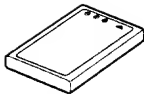
The meanings of the symbols used in this Operating manual are explained below.

	indicates the reference page number for an explanation of the related operation.
	indicates information that is useful to know.
	indicates precautions to be taken when operating the camera.

Checking the Contents of the Package



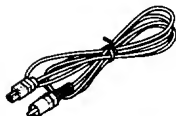
Camera
(Optio 430)



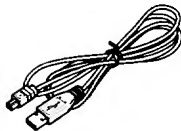
Rechargeable lithium-ion
battery (D-LI2)



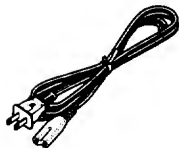
Battery charger
(D-BC2)



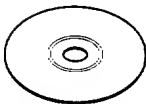
Video cable (I-VC2)



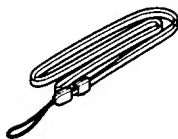
USB cable (I-USB2)



AC plug cord (D-CO2*)



Software CD-ROM
(S-SW2)



Strap EO



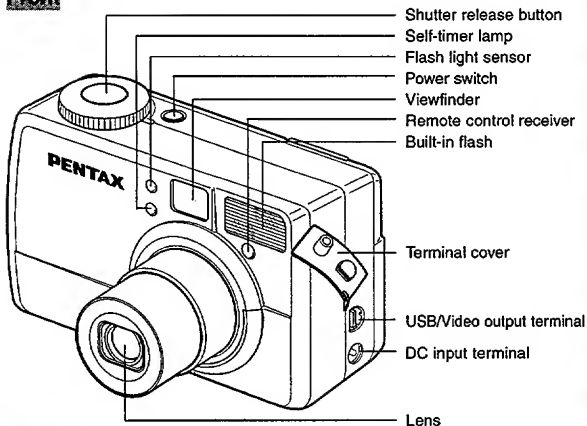
Operating Manual
(this manual)

* Type of AC plug cord

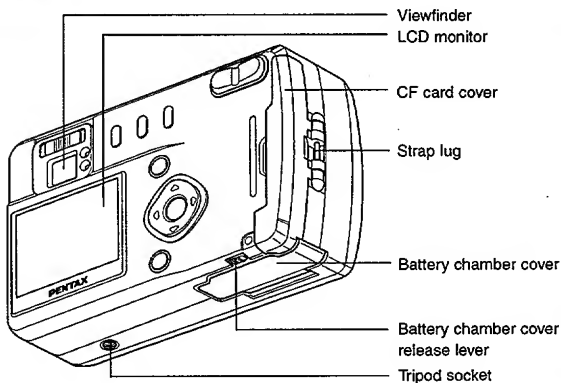
D-CO2A Australia / D-CO2B United Kingdom / D-CO2E Europe / D-CO2H Hong Kong / D-CO2J Japan / D-CO2K Korea / D-CO2U North America, Canada

Names of Parts

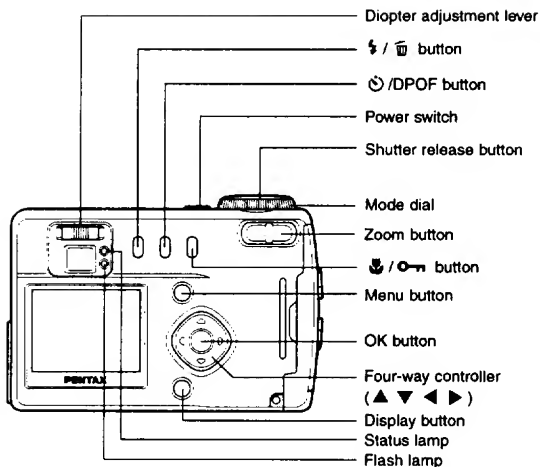
Front



Back



Names of Operating Parts

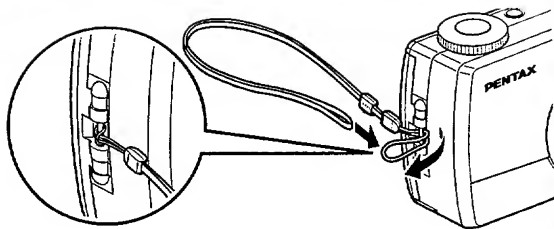


● Guide indications

A guide to available button operation is displayed on the LCD monitor during operation. The buttons are indicated as shown below.

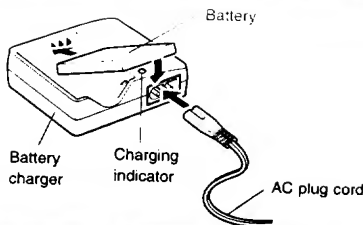
Four-way controller (▲)	▲	Zoom button	
Four-way controller (▼)	▼	Display button	
Four-way controller (◀)	◀	DPOF button	
Four-way controller (▶)	▶	Flash button	
Menu button		Ⓢ button	
OK button		Shutter release button	

Attaching the Strap



Pass the narrow end of the strap through the strap lug and pass the other end through the loop.

Powering the Camera



Charging the Battery

When using the camera for the first time or when the [Battery depleted] message is displayed, charge the battery.

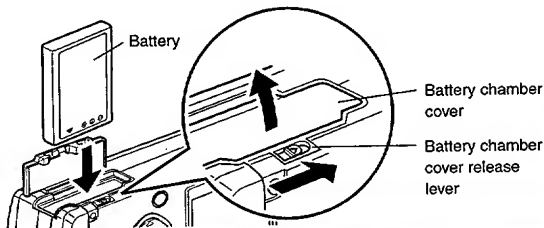
- 1** Connect the AC plug cord to the battery charger.
- 2** Plug the AC plug cord into the power outlet.
- 3** Place the battery in the charger with the label facing down. The charging indicator lights red while the battery is charging and changes to green when charging is completed.
- 4** When charging is completed, remove the battery from the battery charger.



- Charging takes approximately 120 minutes. The appropriate ambient temperature range for charging the battery is 0°C-40°C.
- The charging time may vary depending on the ambient temperature and charging conditions.
- When the battery reaches the end of its service life, the time that the camera can be operated becomes shorter even when the battery is fully charged. In this event, replace the battery.



- Always charge the battery after purchasing or when it has not been used for a long time.
- Do not use the charger to charge batteries other than the rechargeable lithium-ion battery D-Li2.
- If the battery is inserted correctly but the charging indicator fails to light, the battery may be faulty. Replace with a new battery.



Installing the Battery

Install the battery provided. When using the camera for the first time, charge the battery before installing.

- 1** Slide the battery chamber cover release lever in the direction indicated by the arrow to open the battery chamber cover.
- 2** Insert the battery with the label towards back of camera .
- 3** Close the battery chamber cover.



If you intend to use the camera for a long period, use of the AC adapter D-AC2 (optional) is recommended. (p.13)



- Do not open the battery chamber cover or remove the battery when the camera is turned on.
- If you do not intend to use the camera for a long time, remove the battery.
- If the camera is left without the battery for a long time, the date setting will be reset.
- Insert the battery correctly. If the battery is incorrectly oriented, it may cause malfunction.


● Approximate Operating Time (when fully charged)

	Number of recordable images		Playback time
	LCD monitor ON	LCD monitor OFF	
With the flash fired for 50% of the shots	Approx. 130	Approx. 160	Approx. 75 min.
Without the flash	Approx. 160	Approx. 200	

* The above table is based on Pentax measuring conditions and may vary depending on capture mode and shooting conditions.

Caution

● Battery Level Indicator

You can check the battery level by the  symbol displayed on the LCD monitor.

 (lit green) : Adequate power remains.




 (lit green) : Battery is running low.



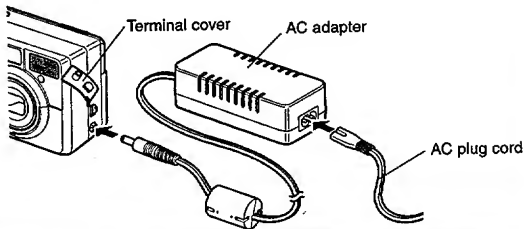
 (lit yellow) : Battery is running very low.



 (lit red) : Battery is exhausted.



[Battery depleted] : After the message is displayed, the camera will turn off.



Using the AC Adapter (optional)

If you intend to use the LCD monitor for a long time or connect the camera to a PC, use of the AC adapter D-AC2 (optional) is recommended.

- 1** Connect the AC plug cord to the AC adapter.
- 2** Plug the AC plug cord into the power outlet.
- 3** Open the terminal cover of your camera and connect the AC adapter to the DC input terminal.

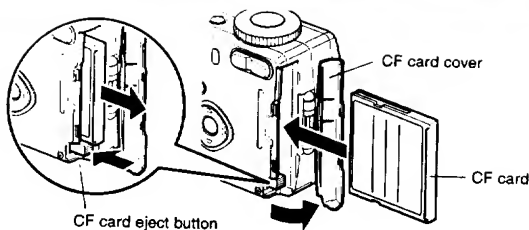


When using the AC adapter, the battery level indicator is not displayed on the LCD monitor.



- Make sure that the camera is turned off before connecting the AC adapter.
- When using the AC adapter D-AC2, be sure to read the operation manual accompanying the AC adapter.

Installing or removing the CF Card (optional)



Captured images are recorded on the CompactFlash (CF) card. Make sure that the camera is turned off before inserting or removing the CF card (optional).

Installing the Card

- 1 Open the CF card cover.
- 2 Orient the card with the surface of the card having the \blacktriangle symbol facing towards the lens and with the pin-connector edge of the card towards the slot and insert fully.
- 3 Close the CF card cover.

Removing the Card

- 1 Open the CF card cover.
- 2 Press the CF card eject button and remove the card.
- 3 Close the CF card cover.

Caution

- If you open the CF card cover when the camera is turned on, the camera will be forcibly turned off.
- If you open the CF card cover while recording an image on the CF card, the recording operation will be terminated (the image will not be saved).

● Approximate Number of Recordable Images and Recorded pixels/Quality levels

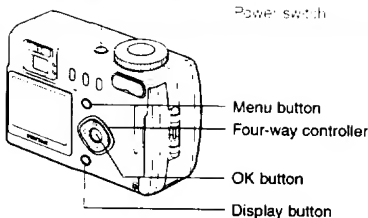
Quality levels Recorded pixels	Best (★★★)	Better (★★)	Good (★)
2240 × 1680	Approx. 5	Approx. 11	Approx. 16
1120 × 840	Approx. 22	Approx. 32	Approx. 64
640 × 480	Approx. 64	Approx. 106	Approx. 200

- The above table indicates is the number of images when using a 16MB CF card.
- The above table is based on standard shooting conditions specified by PENTAX and may vary depending on the subject, shooting conditions, capture mode, CF card, etc.

Precautions When Using a CF Card

- Make sure that the camera is turned off before opening the CF card cover.
- Care should be taken if you remove the CF card immediately after using the camera, as the card may be hot.
- Do not open the CF card cover or turn the camera off while data is being recorded on the card or transferred to another device as this may cause the data to be lost or the card to be damaged.
- Do not bend the CF card or subject it to violent impact. Keep it away from water and store away from high temperature.
- Be sure to format unused CF cards or CF cards that have been used on another camera. Refer to "Formatting a CF Card" (p.72) for instructions on formatting.
- Never open the CF card cover during formatting as this may cause the card to be damaged and become unusable.
- The data on the CF card may be erased in the following circumstances. Pentax does not accept any liability for data that is erased
 - when the CF card is mishandled by the user.
 - when the CF card is exposed to static electricity or electrical interference.
 - when the card has not been used for a long time.
 - when the card is ejected, the AC adapter is disconnected or the battery is removed while the data on the card is being accessed (when the status lamp and flash lamp are blinking green and red).
- The CF card has a limited service life. If it is not used for a long time, the data on the card may become unreadable. Be sure to make a backup of important data on a PC.
- Avoid using or storing the card where it may be exposed to static electricity or electrical interference.
- Avoid using or storing the card in direct sunlight or where it may be exposed to rapid changes in temperature or to condensation.

Initial Settings



When you turn the camera on for the first time, the initial settings screen will be displayed.

You can set the following items and save the settings.

- **Display Language**

You can choose the language in which the menus, error messages etc. are displayed from the following: English, French, German, Spanish, Italian and Japanese.

- **City**

You can choose the name of the city in which you will use the camera from 62 cities.

See p.81 for the list of cities and code names.

- **DST**

You can set to summer time.

- **Date and Time**

You can set the present date and time. The date and time that you set here becomes the Home Time.



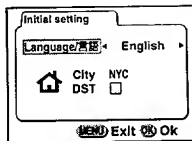
You can skip this operation by pressing the Menu button. In this case, the initial settings screen will be displayed again when you next turn the camera on.

- 1 Turn the camera on.**

- 1. Press the power switch.**

The camera will turn on and the initial settings screen will be displayed on the LCD monitor.

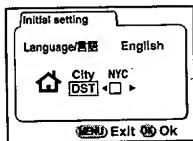
- 2 Select the display language.**
1. Use the four-way controller (**▶** or **◀**) to select the display language.
 2. Press the four-way controller (**▼**).



Caution

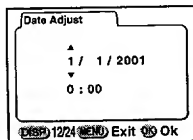
If you skip this operation, the menus and error messages etc. will be displayed in English.

- 3 Select the nearest city in the time zone in which you will use the camera.**
1. Use the four-way controller (**◀ ▶**) to select the city.
 2. Press the four-way controller (**▼**).
 3. Use the four-way controller (**◀ ▶**) to enable (☒) if you live in a area with summer time.
 4. Press the OK button.
The screen for setting the date and time will be displayed.



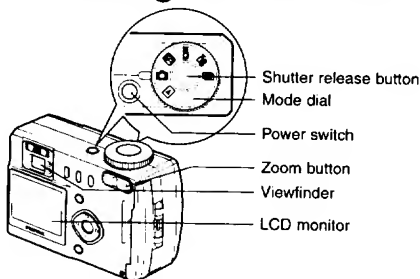
See p.81 for the list of cities and code names.

- 4 Set the date and time.**
1. Press the four-way controller (**▲ ▼**) to change the month.
 2. Press the four-way controller (**▶**).
▲ and ▼ will be displayed above and below the day.
 3. Repeat Steps 1 and 2 to change the [day] [year] [hour] and [minutes] and select the 12-hour or 24-hour display format with the Display button.
 4. When you have finished the settings, press the OK button when the clock reaches 00 seconds.
The screen confirming the settings will be displayed and the camera is ready to take a picture.




You can change the settings after they have been made. Refer to "Changing the Display Language" (p.76), "Setting the World Time" (p.74) and "Changing the Date/Time" (p.73).



Taking Still Pictures

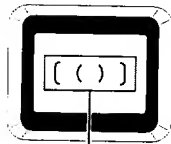


For the simplest procedure to take still pictures:
The flash fires automatically depending on the light conditions.

- 1 Press the power switch.**
The camera will turn on.
- 2 Set the mode dial to .**
- 3 Frame the subject in the viewfinder.**

The focus frame in the middle of the viewfinder indicates the zone of the automatic focusing. You can change the size of the subject by pressing the Zoom button.

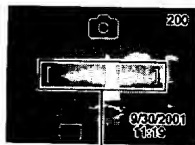
-  makes the subject bigger.
-  makes the subject smaller.






Focus frame

● **To take pictures using the LCD monitor**

When the LCD monitor is turned on, you can take pictures while viewing the image on the LCD monitor.



Focus frame

Changing the focus range and position  p.41, 48
Preventing the flash firing automatically  p.43
Displaying shooting information  p.30

4 Press the shutter release button.

The image will be displayed on the LCD monitor for 0.5 seconds (Instant Review) and recorded on the CF card. When the image seen through the lens is displayed on the LCD monitor, you can take the next picture.



While recording the image on the CF card, the status lamp and the flash lamp will light alternately.

Using the Shutter Release Button

The shutter release button works in a two-step action.

● Press halfway

When the shutter release button is pressed lightly (halfway), the focus, exposure and white balance are locked. You can find the following information on the LCD monitor, the status lamp and the flash lamp.

① Focusing area

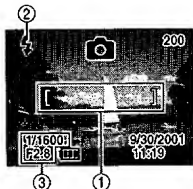
If the subject is in focus, the frame will light green. If the subject is not in focus, the frame will light red.

② Flash symbol

The flash symbol indicates the status of the flash when the shutter release button is pressed.

③ Aperture and shutter speed settings

The aperture and shutter speed settings are usually displayed in white. If the image is under- or over-exposed, they are displayed in orange.

**Status lamp & Flash lamp (on the right of the viewfinder)**

status	Status lamp	Flash lamp
lit	Subject is in focus	Flash is charged
blink	Subject is not in focus	Flash is charging

● Pressed down fully

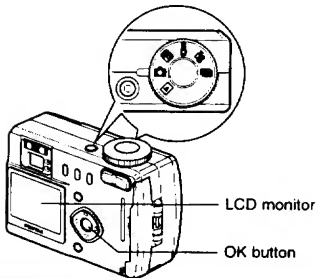
The picture is taken.

Instant Review

The Instant Review default setting is 0.5 seconds. During this time you can delete the image by pressing the button (The [Delete] menu will be displayed.), and selecting [Delete].

Changing the Instant Review Time p.50


Playing Back Still Pictures



Playing Back the Last Image Taken (Easy View)

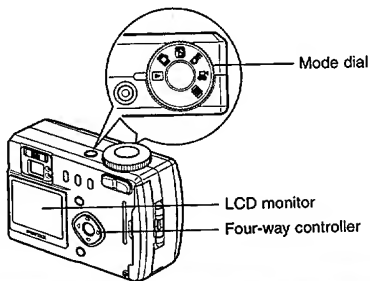
You can display the last still picture taken.

- 1 Press the OK button after taking a picture.**

The last image taken will be displayed on the LCD monitor. During this time you can erase the image by pressing the  button (The [Delete] menu will be displayed.), and selecting [Delete].

Press the OK button again to return to shooting status.





Playing Back a Single Image

You can play back still pictures one at a time.

- 1 Set the mode dial to

An image will be displayed on the LCD monitor.

- 2 Press the four-way controller ().



displays the previous image.

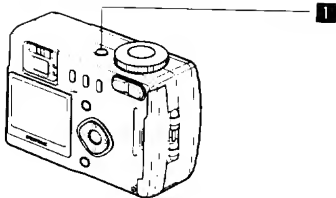


displays the next image.



- In the case of movie pictures, the first frame will be displayed.
- If there are no image stored on the CF card, the [No images in camera] message will be displayed, and if there is no CF card in the camera, the [No card in camera] message will be displayed.

Turning the Camera On and Off



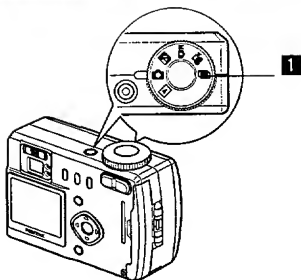
Use the power switch to turn the camera on and off.

1 Press the power switch.

The camera will turn on.






Press the power switch again to turn the camera off.

Changing the Mode










Capture mode is for taking pictures and Playback mode is for playing back or erasing images. The mode is set by the mode dial.

Capture Mode

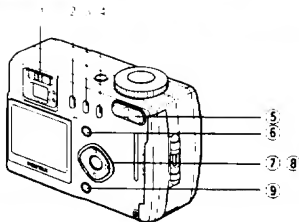
	Auto mode	Most of the settings are made automatically by the camera when a picture is taken.	p.18, 31
	Night-scene mode	This mode is for taking dark scenes such as night views.	p.31
	Manual exposure mode	You can set the aperture and shutter speed manually.	p.32
	Movie picture mode	This mode is for taking moving images.	p.38
	Multiple exposure mode	You can combine images to make one picture.	p.34

Playback Mode

	Playback mode	This mode is for playing back recorded images.	p.53
---	---------------	--	------

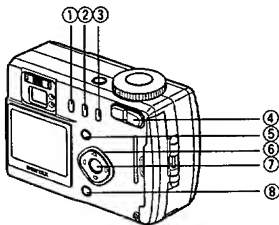
- 1** Turn the mode dial so that the mark is on    
 or .

Using the Button Functions



Capture Mode






- ① **Diopter adjustment lever**
Adjusts the viewfinder for optimum clarity. (p.39)
- ② **Flash button**
Changes the flash mode. (p.43)
- ③ **Shooting mode button**
Changes the shooting mode as follows.
Using the Self-timer (p.36)
Using the Remote Control Unit (p.37)
Continuous Shooting (p.35)
* When the Capture mode is set on or , Continuous Shooting mode will be skipped.
- ④ **Focus button**
Changes the focus mode. (p.41)
- ⑤ **Zoom button**
Changes the size of the subject. (p.40)
- ⑥ **Menu button**
Displays the active menus in Capture mode. (p.26, p.28)
- ⑦ **Four-way controller (Left)**
Changes the EV compensation in mode. (p.42)
Changes the shutter speed in mode. (p.32)
- ⑧ **Four-way controller (Right)**
Adjusts the focus in **MF** mode. (p.41)
Changes the aperture value in mode and changes the exposure mode in mode.
- ⑨ **Display button**
Changes the information displayed on the LCD monitor. (p.30)



Playback Mode

- ① **button**
Deletes the image. (p.58)
- ② **DPOF button**
Sets the print service. (p.61)
- ③ **button**
Protects the image from erasure. (p.60)
- ④ **Zoom button**
Changes the size of the image displayed on the LCD monitor.
(p.53)
- ⑤ **Menu button**
Displays the active menus in Play mode. (p.29)
- ⑥ **Four-way controller (◀ ▶)**
Displays images one by one. (p.21)
- ⑦ **OK button**
Displays nine images at once. (p.56)
- ⑧ **Display button**
Changes the information displayed on the LCD monitor. (p.55)

Using the Menu

When you press the Menu button, the menu is displayed on the LCD monitor. You can set the shooting functions in Capture mode (   ) or the playback functions in Playback mode ().



You can set the camera functions in both Capture mode and Playback mode.

How to Use the Menu

When you are making settings from a menu, a guide to operation is displayed on the LCD monitor.

1 Press the Menu button.



The menu screen will be displayed. The selected area will be displayed in a green frame.

Use the four-way controller ( ) to select the menu screen.


2 Press the four-way controller ().

The frame will move to the menu item.

3 Use the four-way controller () to select an item.

Use the four-way controller ( ) to move the frame up or down.

4 Use the four-way controller () to change the setting.

If there is a Select screen, use the four-way controller () to move to the Select screen.

A guide to operation of the buttons will be displayed on the LCD monitor for a Select screen. When you have finished making the settings, press the OK button to return to the menu.

5 Press the OK button.

The settings will be saved and the screen will return to shooting or playback status.

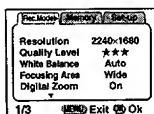
Caution

- If you press the Menu button and leave the menu screen, any changes to setting will not be saved.
- Even if you press the OK button and leave the menu screen, if you remove the battery before turning off the camera or do not otherwise turn off the camera correctly, any changes to setting will not be saved.

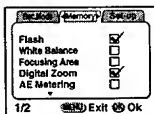
In Capture Mode

1 Menu button

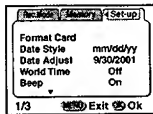
[Rec.Mode] menu



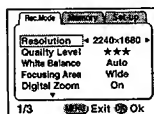
[Memory] menu



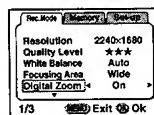
[Set-up] menu



2



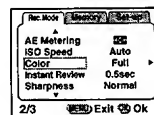
3



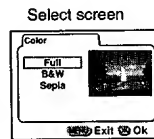
4



3



4



3

To the next screen




When you press the Menu button in Playback mode, the Playback mode menu will be displayed.

Press the four-way controller (◀ ▶) to switch to the [Playback] or [Set-up] menu.

Menu List

Active Menus in Capture Mode

● [Rec.Mode] Menu

Item	Description	Default Setting	Page
Resolution	For selecting the size of recorded pixels.	2240 × 1680	p.44
Quality Level	For selecting the image compression rate.	★★	p.45
White Balance	For adjusting the color balance according to lighting.	Auto	p.46
Focusing Area	For changing the range and position of the autofocus.	Wide	p.48
Digital Zoom	For taking digital zoom pictures.	On	p.40
AE Metering	For setting the metering method to determine the exposure.		p.49
ISO Speed	For setting the ISO speed.	Auto	p.49
Color	For selecting the color mode.	Full	p.50
Instant Review	For setting the instant review time.	0.5sec	p.50
Sharpness	For setting the sharpness.	Normal	p.51
Saturation	For setting the saturation.	Normal	p.51
Contrast	For setting the contrast.	Normal	p.51

● [Memory] Menu

This menu is for selecting whether the settings are saved when the camera is turned off.

Refer to p.52 for the items that can be set.

Active Menus in Playback Mode

● [Playback] Menu

Item	Description	Default setting	Reference
Slideshow	Recorded images are played successively.	3 sec. intervals	p.57
Alarm	Alarm sounds at the pre-set time.	Off	p.79

Active Menus in Capture/Playback Mode

● [Set-up] Menu

Item	Description	Default Setting	Reference
Format Card	For formatting the CF card		p.72
Date Style	For setting the date style	Set according to the Language default setting	p.73
Date Adjust	For adjusting the date and time	01/01/2001	p.73
World Time	For setting the world time	Default world time setting	p.74
Beep	For adjusting the beep sound when a button is pressed	On	p.75
Language	For changing the language in which menus and messages are displayed	English	p.76
Video Out	For setting the video output format	Set according to the Language default setting	p.76
Sleep Timeout	For setting the power-saving function	1min.	p.77
Auto Power Off	Power is turned off automatically	3min.	p.77
Brightness Level	For setting the brightness of the LCD monitor	4	p.78
Reset	For returning the camera settings to defaults		p.78



The [Sleep Timeout] will not appear in Playback mode.

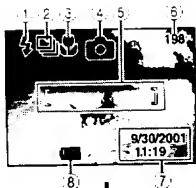
Displaying Shooting Information (Display Mode)

You can display shooting information on the LCD monitor. Use the Display button to change the information displayed.

Display On

Shooting information is displayed.

- ① Flash mode ② Shooting mode
- ③ Focus mode ④ Capture mode
- ⑤ AF frame ⑥ Remaining images
- ⑦ Date & time ⑧ Battery symbol

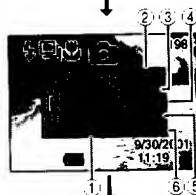


Histogram Display

The brightness distribution is displayed.

- ① Histogram ② Recorded pixels
- ③ Quality level ④ White balance
- ⑤ AE metering ⑥ ISO speed

The x-axis shows the brightness (darkest at the left end and brightest at the right end) and the y-axis shows the pixel numbers.



Display Off

No shooting information is displayed (except the AF frame).

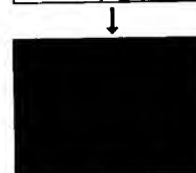
- If there is any change in the battery level, the battery symbol is displayed.
- When in manual mode, the aperture setting and shutter speed are displayed.
- If there is any change in such as Flash mode, the mode you have changed is displayed for a few seconds.



LCD Monitor Off

The LCD monitor is turned off.

Saving the Display Mode  p.52



Display On

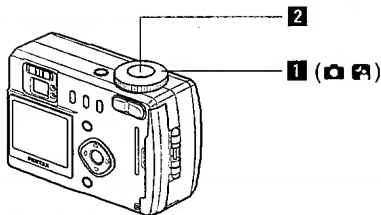


When using the AC adapter, the battery level indicator is not displayed on the LCD monitor.





LCD Monitor Off cannot be set in Movie Picture mode.

Taking Pictures



Taking Still Pictures in Auto Mode (Auto Mode)


By setting the mode dial to , most of the settings will be made automatically by the camera when a picture is taken.



- 1** Set the mode dial to .
- 2** Press the shutter release button.
The picture will be taken.

Using the Shutter Release Button  p.19

Taking Dark Scenes (Night-Scene Mode)

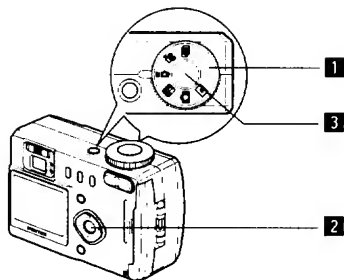
The appropriate settings are made automatically for taking dark scenes such as night views.

- 1** Set the mode dial to .
- 2** Press the shutter release button.
The picture will be taken.

Using the Shutter Release Button  p.19
Playing Back Images  p.53



As the shutter speed is slow in low light conditions, care should be taken to avoid camera shake.



Taking Pictures Manually (Manual Exposure Mode)

You can set the shutter speed and aperture manually.

1 Set the mode dial to **M**.

2 Use the four-way controller to change the shutter speed and aperture.

Four-way controller (►):

Decrease the shutter speed

Four-way controller (◄):

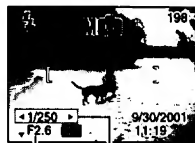
Increase the shutter speed

Four-way controller (▲):

Decrease the aperture value









Four-way controller (▼):

Increase the aperture value



Aperture Shutter speed

If the combination of shutter speed and aperture do not give an appropriate exposure, a warning will be displayed.

 (lit)	If the exposure difference from the appropriate exposure is between -2.0EV and -0.3EV,  will light, and if between +0.3EV and +2.0EV,  will light and the level will be displayed.
 (blinking)	If the picture is underexposed,  will blink, and if overexposed,  will blink. If the exposure cannot be measured,  and  will blink alternately.

3 Press the shutter release button.

The picture will be taken at the set shutter speed and aperture settings.

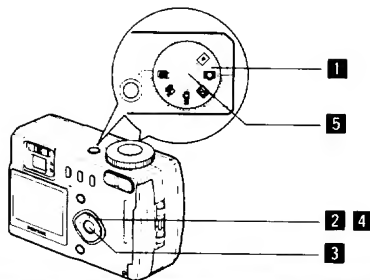
Playing Back Images  p.53



The shutter speed and aperture settings will be saved when the camera is turned off.



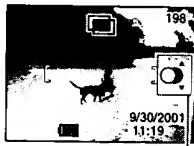
- Exposure compensation is not available in this mode.
- When the focus mode is set to manual, the four-way controller (▲ ▼) becomes the manual focus button and the aperture setting cannot be changed.
- You cannot select [Auto] or [Auto + Red-eye reduction] flash mode.



Combining Images (Multiple Exposure Mode)

You can combine a new image with an image already recorded.

- 1** Set the mode dial to . The last image recorded will be played back.
- 2** Use the four-way controller () to choose the picture you want to combine it with.
- 3** Press the OK button.
- 4** Use the four-way controller () to choose the exposure mode.
 - : Priority is given to the brighter image
 - : Priority is given to the darker image
 - : The average exposure is obtained



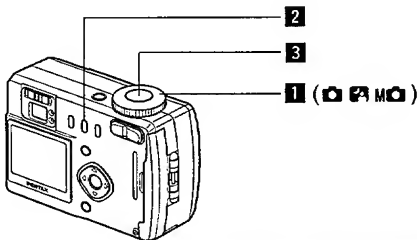
Exposure mode

- 5** Press the shutter release button. After the Instant Review screen is displayed, the [Continue Shooting] message will be displayed. If you select [Continue] and press the OK button, the composite picture you have just made will be played back and the camera is ready to combine the next picture. The newly composed picture will be saved.

Playing Back Images p.53



- Movie pictures cannot be used to make composite pictures.
- Continuous shooting is not possible in Multiple exposure mode.
- The LCD monitor cannot be turned off in Multiple exposure mode.
- If there is not even a single image on the CF card, the message [No base image found] will be displayed. Capture the base image in , , or mode.
- The digital zoom can not be used.



Continuous Shooting

Pictures are taken continuously while the shutter release button is pressed.

1 Set the mode dial to or .

2 Press the button three times.
The mode will change to Continuous Shooting mode.



3 Press the shutter release button.
Pictures will be taken continuously while the shutter release button is pressed, and stop when the button is released.

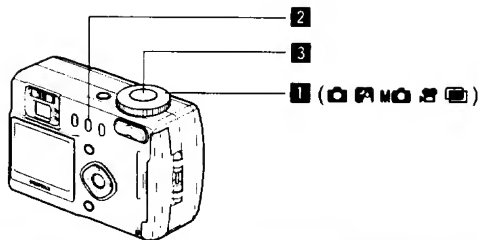
Playing Back Images p.53



- You can continue shooting until the CF card is full.
- The interval will vary according to the [Resolution] and [Quality Level] setting.



- The flash will not fire in Continuous Shooting mode.
- Continuous shooting is not possible in Movie picture and Multiple exposure mode.



Using the Self-Timer

The picture is taken ten seconds after the shutter release button is pressed.

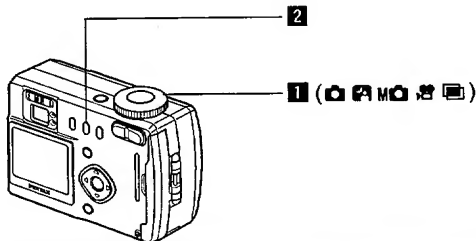
- 1** Set the mode dial to or .
- 2** Press the button.



- 3** Press the shutter release button.

The self-timer is engaged and the self-timer lamp lights. The picture is taken approximately three seconds after the self-timer lamp starts to blink.

Playing Back Images p.53



Using the Remote Control Unit (optional)

You can take pictures using the wireless remote control unit (optional).

1 Set the mode dial to or .

2 Press the button twice.

The self-timer lamp will blink and the camera is ready to take pictures.

If you press the Zoom button on the remote control unit, the zoom will switch from [Wide] to [Tele] to [Middle].



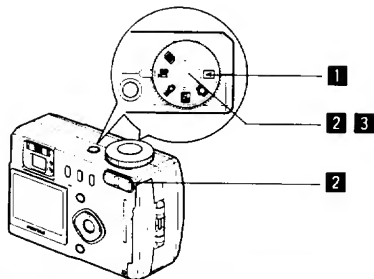
3 Press the shutter release button on the remote control unit.

The self-timer lamp will blink rapidly and the picture will be taken after approximately three seconds.

Playing Back Images p.53



- The buttons on the camera can be used in the same way.
- Please ensure that the remote control unit is no more than 5 meters apart from the front of the camera.
- When the digital zoom function is enabled, the digital zoom can not be operated with the remote control unit, but the digital zoom can be operated by pressing the Zoom button on the camera. However, the camera will revert to optical zoom mode by pressing the Zoom button on the remote control unit.
- The powersaving function can be worked (the self-timer lamp will also go off).



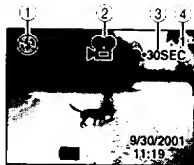
Taking Movie Pictures (Movie Picture Mode)

This mode enables you to take moving images. The maximum length of one motion picture is 30 seconds.

1 Set the mode dial to .

The following information will be displayed on the LCD monitor.


- 1 Flash Off
- 2 Movie Picture mode
- 3 Remaining shooting time
- 4 Remaining number of sets




2 Press the shutter release button.

Shooting will start.

You can change the size of the image using the Zoom button.

 makes the image bigger

 makes the image smaller

3 Press the shutter release button.

Shooting will end.

The remaining shooting time will be displayed on .

● Keeping the shutter release button pressed

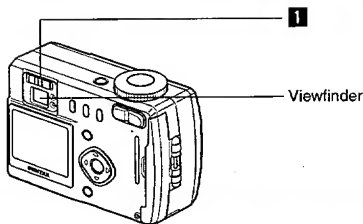
If you keep the shutter release button pressed for more than one second, shooting will start, and will stop when the button is released.

Playing Back Images  p.53

Caution

- The flash will not fire in Movie Picture mode.
- Continuous shooting is not possible in Movie Picture mode.
- The LCD monitor cannot be turned off in Movie Picture mode.

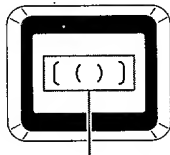
Setting the Shooting Functions



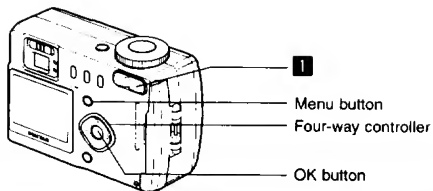
Adjusting the Viewfinder

If the indicators in the viewfinder are hard to see, you can adjust the diopter in the range of -3m^{-1} to $+1\text{m}^{-1}$ (per meter) (at 3m).

- 1** Aim the camera towards the light and move the diopter adjustment lever to the left or right while looking through the viewfinder. Adjust the focus frame in the middle of the viewfinder to the optimum position.



Focus frame



Changing the Size of the Subject

You can set the shooting range to Tele or Wide.

1 Press the Zoom button in Capture mode.




makes the subject larger

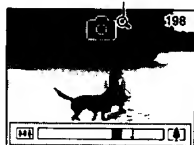


makes the subject smaller

When the digital zoom function is disabled, you can take zoom pictures up to 3x.

When the digital zoom function is enabled, you can further enlarge the image by pressing the  button when the zoom is at the maximum Tele position. (equivalent to max. 6x when using the digital zoom)

Digital zoom symbol



Zoom bar

Enabling the Digital Zoom Function

1 Press the Menu button in Capture mode.

The [Rec.Mode] menu will be displayed.

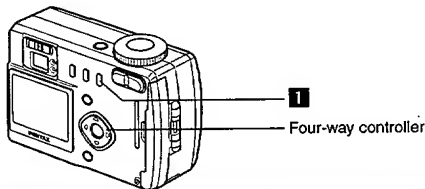
2 Press the four-way controller (▼) five times to select [Digital Zoom].

3 Use the four-way controller (◀ ▶) to select On or Off.



4 Press the OK button.

The camera is ready to take a picture.

Saving the Digital Zoom Function Setting  p.52



Selecting a Focus Mode

None	Auto	The camera is focused on the subject in the focusing area when the shutter release button is pressed halfway.
	Macro Mode	This mode is used when the distance to the subject is approx. 14cm-50cm (0.46ft-1.64ft). The camera is focused on the subject in the focusing area when the shutter release button is pressed halfway.
	Infinity-landscape mode	This mode is used for taking distant objects.
MF	Manual Focus Mode	The subject is brought into focus manually.

1 Press the button in Capture mode.

The focus mode changes each time the button is pressed and the setting is displayed on the LCD monitor.

The camera is ready to take the picture in the set focus mode.



- The focus mode returns to [Auto] when the camera is turned off.
- The lens position is normally set to wide on Macro mode.
- The default setting of the focus mode is [Auto]. When the focus mode is [Auto], no icon is displayed on the LCD monitor.




If you take a picture while looking through the viewfinder when the focus mode is set on Macro, the range of the resulting picture may differ from what was seen in the viewfinder.

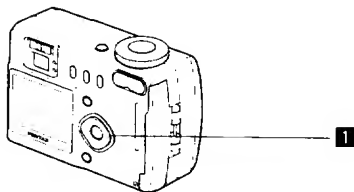
Manual Focus

You can focus the camera on the subject manually when the mode is set on MF.

Four-way controller (▲)
increases the distance to the focusing position

Four-way controller (▼)
decreases the distance to the focusing position

Saving the Manual Focus Position  p.52



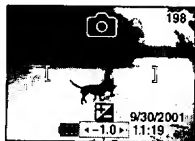
EV Compensation

EV compensation is required when there is an extreme difference in brightness between the background and the subject.

- 1** Press the four-way controller (◀ ▶) in Capture mode.

Four-way controller (▶)
increases the EV compensation to a positive (+) level

Four-way controller (◀)
decreases the EV compensation to a negative (-) level



EV compensation level

The set level is displayed on the LCD monitor.



- If you press ◀ or ▶ one time, or set to ± 0 , the set level displayed on the LCD monitor will go off after three seconds.
- EV compensation is reset after taking a picture.



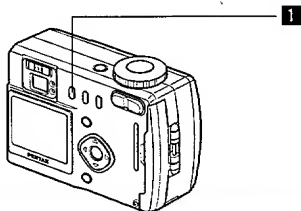
This function cannot be used in Manual Exposure mode.

Changing the Shutter Speed

See "Taking Pictures Manually (Manual Exposure Mode)" (p.32).

Changing the Aperture Setting

See "Taking Pictures Manually (Manual Exposure Mode)" (p.32).



Selecting the Flash Mode

None	Auto	The flash discharges automatically depending on the light conditions.
③	Flash Off	The flash will not discharge.
⚡	Flash On	The flash discharges regardless of the brightness.
ⓂA	Auto + Red-eye Reduction	This mode reduces the phenomenon of red eyes caused by the light from the flash being reflected in the subject's eyes. The flash discharges automatically.
Ⓜ⚡	Flash On + Red-eye Reduction	This mode reduces the phenomenon of red eyes caused by the light from the flash being reflected in the subject's eyes. The flash will discharge regardless of lighting conditions.

- The flash is off when the Capture mode is set to , continuous shooting, or infinity-landscape mode.
- [Auto] and [Auto + Red-eye Reduction] cannot be selected when the Capture mode is set to .
- In [Auto + Red-eye Reduction] and [Flash On + Red-eye Reduction] modes, the flash pre-discharges before you take a picture.

1 Press the button in Capture mode.

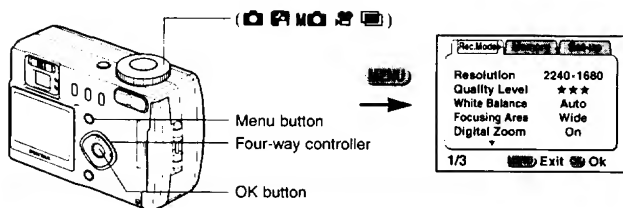
The flash mode changes each time the button is pressed and the set mode is displayed on the LCD monitor.

The flash lamp blinks red while the flash is charging. When charging is completed, the flash lamp lights red while pressing the shutter release button halfway.

The camera is ready to take the picture in the set flash mode.

Saving the Flash Mode p.52

How to recall the [Rec.Mode] menu

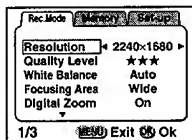


Selecting the Recorded Pixels

You can choose the size of recorded pixels from [2240 × 1680], [1120 × 840] and [640 × 480].

- 1 Select **[Resolution]** from the **[Rec.Mode]** menu.
- 2 Use the four-way controller (◀ ▶) to change the size.
- 3 Press the OK button.

The camera is ready to take the picture.



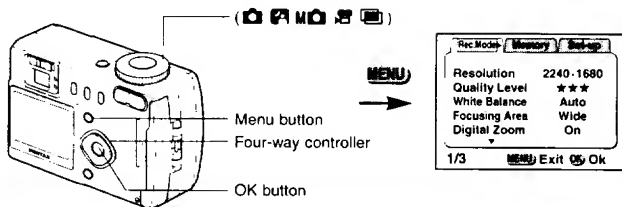
Selecting the Quality Levels

You can choose the image compression rate.

★★	Better	Standard level
★★★	Best	The quality is the best and there is a high volume of image data.
★	Good	The quality is good and there is a low volume of image data.

- 1** Select [Quality Level] from the [Rec.Mode] menu.
- 2** Use the four-way controller (◀ ▶) to change the image quality.
- 3** Press the OK button.
The camera is ready to take the picture.

How to recall the [Rec.Mode] menu

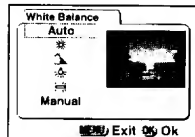


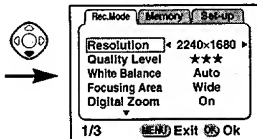
Adjusting the Color Balance according to Lighting (White Balance)

You can take pictures in the appropriate colors by setting the white balance according to the light conditions.

Auto	Auto	The camera adjusts the white balance automatically.
	Daylight	Use this mode when taking pictures outside in sunlight.
	Shade	Use this mode when taking pictures outside in the shade.
	Tungsten Light	Use this mode when taking subjects under electric or other tungsten light.
	Fluorescent Light	Use this mode when taking subjects under fluorescent light.
Manual	Manual	Use this mode when taking pictures by adjusting the white balance manually.

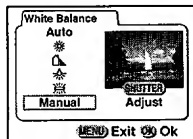
- 1 Select [White Balance] from the [Rec.Mode] menu.**
- 2 Press the four-way controller (►).**
The white balance screen will be displayed.
- 3 Use the four-way controller (▲ ▼) to change the setting.**
- 4 Press the OK button twice.**
The camera is ready to take the picture.





Manual Setting

- 1** Select [Manual] on the white balance screen.
- 2** Press the shutter release button.
The white balance is automatically adjusted, [Complete] is displayed on the LCD monitor and the display returns to the menu screen.

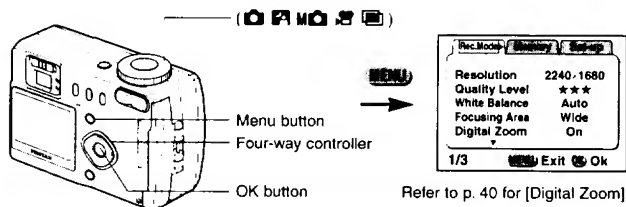


When you adjust the white balance, point your camera at a blank sheet of paper, etc. and press the shutter release button.

- 3** Press the OK button.
The camera is ready to take the picture.

Saving the White Balance Setting p.52

How to recall the [Rec.Mode] menu

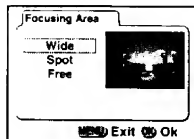


Changing the AF Area (Focusing Area)

You can change the range and position of the autofocus area.

Wide	Normal range
Spot	The range becomes smaller.
Free	You can change the position of the autofocus area.

- 1 Select [Focusing Area] on the [Rec.Mode] menu.
- 2 Press the four-way controller (►). The Focusing Area screen will be displayed.
- 3 Use the four-way controller (▲▼) to change the setting.
- 4 Press the OK button twice. The camera is ready to take the picture.

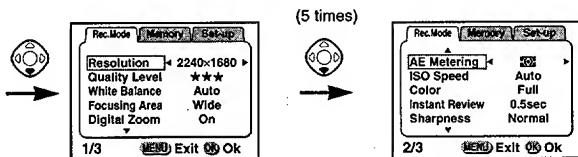


Changing the Position

- 1 Select [Free] on the Focusing Area screen.
- 2 Press the four-way controller (►).
- 3 Use the four-way controller to move the focusing area.
- 4 Press the OK button 3 times. The camera is ready to take the picture.



Saving the Focusing Area p.52



Setting the Light Metering Range to Determine the Exposure (AE Metering)

	Multi segment	The exposure is determined by the entire screen.
	Centre-weighted	The exposure is determined mainly by the centre of the screen.
	Spot	The exposure is determined by the middle of the screen only.

- 1 Select [AE Metering] on the [Rec.Mode] menu.
- 2 Use the four-way controller (◀ ▶) to change the metering mode.
- 3 Press the OK button.
The camera is ready to take the picture.

Saving the AE Metering Method p.52



When you set the metering mode to [Spot], the light metering range will change as you move the autofocus area.

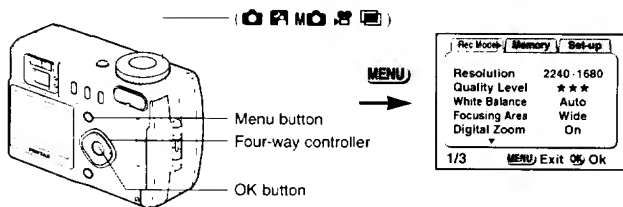
Setting the ISO Speed (ISO Speed)

Auto	The camera sets the speed automatically.
100	Increases the exposure time
200	Decreases the exposure time

- 1 Select [ISO Speed] on the [Rec.Mode] menu.
- 2 Use the four-way controller (◀ ▶) to change the ISO speed.
- 3 Press the OK button.
The camera is ready to take the picture.

Saving the ISO Speed p.52

How to recall the [Rec.Mode] menu



Selecting the Color Mode (Color)

Full	The picture is taken in color
B & W	The picture is taken in black and white.
Sepia	The picture is taken in sepia.

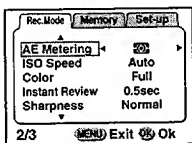
- 1 Select [Color] on the [Rec.Mode] menu.
- 2 Press the four-way controller (**▶**).
The Color screen will be displayed.
- 3 Use the four-way controller (**▲ ▼**) to change the setting.
- 4 Press the OK button twice.
The camera is ready to take the picture.

Setting the Instant Review Time (Instant Review)

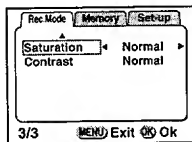
You can choose the Instant Review time from 0.5sec. 1sec. 2sec. 3sec. 4sec. 5sec or Off (no display).

- 1 Select [Instant Review] on the [Rec.Mode] menu.
- 2 Use the four-way controller (**◀ ▶**) to change the display time.
- 3 Press the OK button.
The camera is ready to take the picture.

(6 times)



(5 times)



Setting the Sharpness (Sharpness)

You can choose whether you want the image to have sharp or soft outlines.

- 1 Select [Sharpness] on the [Rec.Mode] menu.
- 2 Use the four-way controller (◀ ▶) to change the setting from [Normal] to [Soft] to [Hard].
- 3 Press the OK button.
The camera is ready to take the picture.

Setting the Saturation (Saturation)

- 1 Select [Saturation] on the [Rec.Mode] menu.
- 2 Use the four-way controller (◀ ▶) to change the setting from [Normal] to [High] to [Low].
- 3 Press the OK button.
The camera is ready to take the picture.

Setting the Contrast (Contrast)

- 1 Select [Contrast] on the [Rec.Mode] menu.
- 2 Use the four-way controller (◀ ▶) to change the setting from [Normal] to [High] to [Low].
- 3 Press the OK button.
The camera is ready to take the picture.

Saving the Settings (Memory)

You can choose whether you want the set values to be saved when the camera is turned off. If you select ☒ (On), the settings will be saved in the status they were in immediately before the camera was turned off. If you select ☐ (Off), the settings will be reset to the defaults.

Item	Description	Default Setting
Flash	The setting on the button is saved.	<input checked="" type="checkbox"/>
White Balance	The [White Balance] setting on the [Rec.Mode] menu is saved.	<input type="checkbox"/>
Focusing Area	The [Focusing Area] setting on the [Rec.Mode] menu is saved.	<input type="checkbox"/>
Digital Zoom	The [Digital Zoom] setting on the [Rec.Mode] menu is saved.	<input checked="" type="checkbox"/>
AE Metering	The [AE Metering] setting on the [Rec.Mode] menu is saved.	<input type="checkbox"/>
ISO Speed	The [ISO Speed] setting on the [Rec.Mode] menu is saved.	<input type="checkbox"/>
MF Position	The focus position set by Manual Focus is saved and restored when Manual Focus is next selected.	<input type="checkbox"/>
Display	The LCD monitor display mode is saved.	<input type="checkbox"/>
File No.	The file number is saved. If a new CF card is inserted, the sequential file number is assigned.	<input checked="" type="checkbox"/>

- 1 Press the Menu button in Capture mode.**

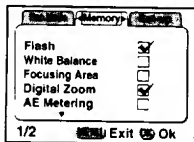
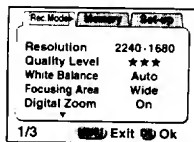
- 2 Press the four-way controller (▶).**
The [Memory] menu will be displayed.

- 3 Use the four-way controller (▲ ▼) to select the item.**

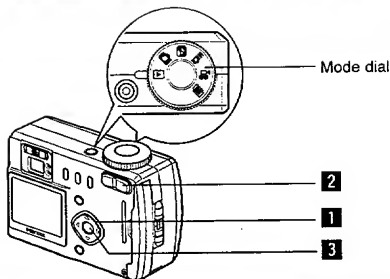
- 4 Use the four-way controller (◀ ▶) to switch ☒ and ☐.**

- 5 Press the OK button.**

The camera is ready to take the picture.



Playing Back Images on the Camera



Playing Back Still Pictures

See "Playing Back a Single Image" (p.21).

Zoom Display

You can display images magnified up to four times. A guide to operation is displayed on the LCD monitor during magnification.

- 1 Set the mode dial to and choose the image you want to magnify with the four-way controller ().

- 2 Press on the Zoom button.
The image will be magnified (1x to 4x).

- The following operations can be performed while the magnified image is displayed.

Four-way controller :

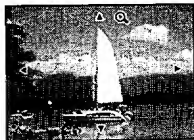
Moves the image position

Zoom button [] :

Makes the image smaller

Display button :

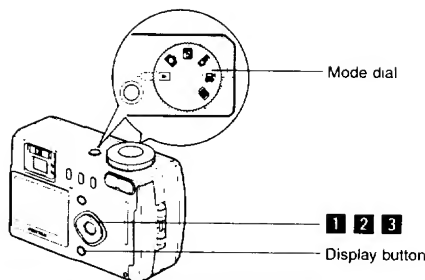
Switches the guide display off and on



- 3 Press the OK button.
Zoom playback will end.

Caution.

Movie pictures cannot be magnified.



Playing Back Movie Pictures

You can play back Movie pictures. A guide to operation is displayed on the LCD monitor during playback.

- 1** Set the mode dial to and choose the movie picture you want to play back with the four-way controller ().

- 2** Press the four-way controller (). Playback will start.

- The following operations can be performed during playback.

Four-way controller () :

Reverse playback

Four-way controller () :

Forward playback

Four-way controller () : Pause

Display button : Changes the Display mode

- The following operations can be performed while Pause is engaged.

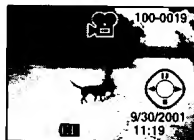
Four-way controller () : Frame forward

Four-way controller () : Frame return

Four-way controller () : Releases the Pause function

Display button : Changes the Display mode

- 3** Press the four-way controller (). Playback ends.



Movie pictures cannot be played by zoom display.

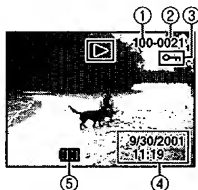
Displaying Shooting Information (Display mode)

You can display information on the LCD monitor when shooting. The information displayed can be changed by pressing the Display button.

Display On

Information is displayed when shooting.

- ① Folder name ② File name
- ③ Protect symbol
- ④ Shooting date
- ⑤ Battery symbol

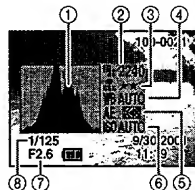


Histogram Display

The brightness distribution of the image is displayed.

The x-axis shows the brightness (darkest at the left end and brightest at the right end) and the y-axis shows the pixel numbers.

- ① Histogram
- ② Recorded pixels
- ③ Quality level
- ④ White balance
- ⑤ AE metering
- ⑥ ISO speed
- ⑦ Aperture
- ⑧ Shutter speed

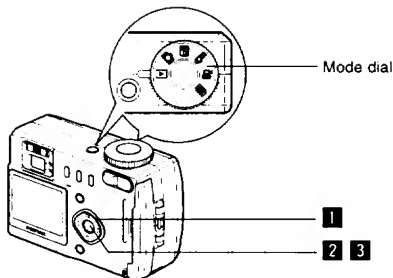


Display Off

No information is displayed when shooting.



Display On



Nine-image Display

You can display nine images at the same time.

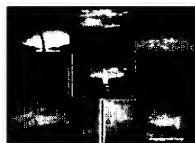
- 1 Set the mode dial to and choose an image with the four-way controller ().

- 2 Press the OK button.

Nine images will be displayed with the selected image in the center.

Choose an image with the four-way controller ().

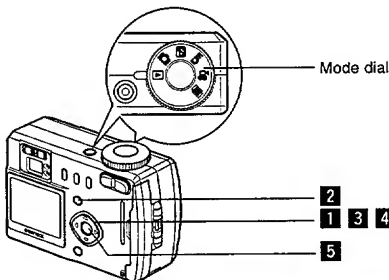
If you press the four-way controller () while an image on the left row is selected, previous 9 images will be displayed. If you press the four-way controller () while an image on the right row is selected, next 9 images will be displayed.



Selected image

- 3 Press the OK button.

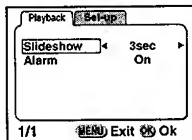
The screen will return to single-image display of the selected image.



Slideshow

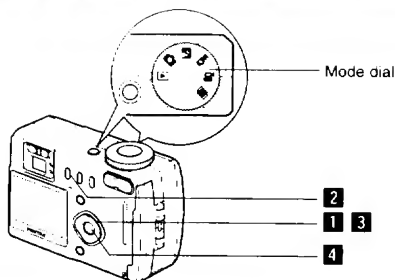
You can play back all the images on the CF card continuously.

- 1** Set the mode dial to and choose the image with which to start the slideshow with the four-way controller ().
- 2** Press the Menu button.
The [Playback] menu will be displayed.
- 3** Select [Slideshow] with the four-way controller ().
- 4** Use the four-way controller () to change the playback interval.
- 5** Press the OK button.
Playback will start at the set interval.
- 6** Press any button (except the shutter release button).
The slideshow will stop.



- The slideshow will continue until you press any button.
- Movie pictures will be played through regardless of the set playback interval.

Erasing Images



Erasing a Single Image

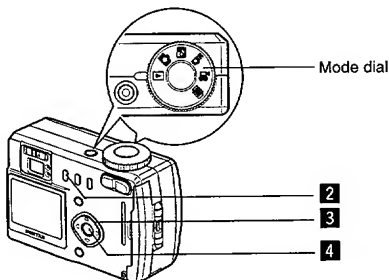
- 1 Set the mode dial to and choose the image you want to erase with the four-way controller ().
- 2 Press the button.
The [Delete] menu will be displayed.
- 3 Select [Delete] with the four-way controller ().
- 4 Press the OK button.



Playback/Erasing



You can also delete images from Instant Review (p.19) and Easy View (p.20).






Erasing All Images

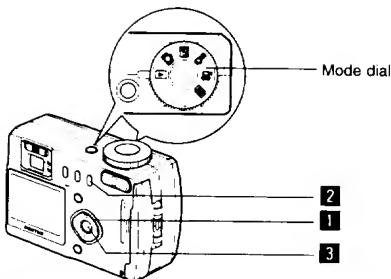
You can erase all the images on the CF card.

Caution

- Once erased, images cannot be restored.
- Protected images cannot be erased.

- 1 Set the mode dial to .
- 2 Press the  button twice.
The [Delete (All)] menu will be displayed.
- 3 Select [Delete All] with the four-way controller ().
- 4 Press the OK button.





Protecting Images from Deletion (Protect)

You can protect images from being accidentally erased.

- 1** Set the mode dial to and choose the image you want to protect with the four-way controller (◀ ▶).
- 2** Press the button.
The [Protect] menu will be displayed.
- 3** Select [Protect] with the four-way controller (▲).
- 4** Press the OK button.



Protect release is selected in the same way as [Unprotect.]

Protecting All Images

You can protect all the images.

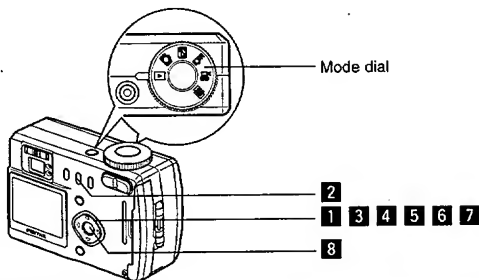
- 1** Set the mode dial to .
- 2** Press the button twice.
The [Protect (All)] menu will be displayed.
- 3** Select [Protect] with the four-way controller (▲).
- 4** Press the OK button.

Caution

Even protected images will be erased by formatting a CF card.

Setting the Printing Service

You can print the images on the CF card using a DPOF (Digital Print Order Format) printer or at a printing service.



Printing Single Image

Set the following items for each image.

- **Copies**

Set the number of prints up to a maximum of 99.

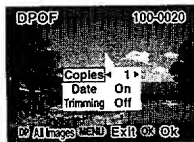
- **Date**

Specify whether you want the date inserted on the print or not.

- **Trimming**

You can have prints made in a different size to that of the original image.

- 1** Set the mode dial to and choose the image for which you want to specify the number of prints with the four-way controller (◀ ▶).
- 2** Press the DPOF button.
The [DPOF] menu will be displayed.
- 3** Use the four-way controller (◀ ▶) to change the number of prints.
- 4** Press the four-way controller (▼).
The frame will move to [Date].
- 5** Use the four-way controller (◀ ▶) to select whether to insert the date or not.



On : The date will be printed

Off : The date will not be printed

- 6 Press the four-way controller (▼).**
The frame will move to [Trimming].

- 7 Change the print size.**
Press the four-way controller (▶) to display the trimming screen.

- The following operations can be performed from the trimming screen.

Display button :

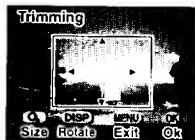
Switches between vertical and horizontal

Zoom button : Changes the image size

Four-way controller :

Moves the trimming position up, down, left and right

OK button : Returns to the menu screen



- 8 Press the OK button.**

Prints can be made according to the settings.

Printing All Images

- 1 Set the mode dial to [] and press the DPOF button twice.**

The [DPOF (All)] menu will be displayed.

- 2 Use the four-way controller (◀▶) to select the number of prints.**

You can specify up to 99 prints.

- 3 Press the four-way controller (▼).**

The frame will move to [Date].

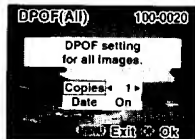
- 4 Use the four-way controller (◀▶) to select On or Off.**

On : The date will be printed

Off : The date will not be printed

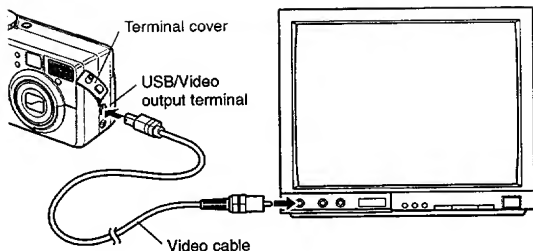
- 5 Press the OK button.**

Prints can be made according to the settings.



- You cannot select the trimming function in the [DPOF (All)] menu.
- The setting for a single image will be cancelled.
- The setting is not possible for movie pictures.

Viewing Images on a TV



By using the video cable, you can capture and play back images on a TV monitor. Make sure that both the TV and the camera are turned off before connecting the cable.

- 1** Open the terminal cover and connect the video cable.
- 2** Connect the other end of the video cable to the image input terminal of the TV.
- 3** Turn the TV and camera on.

Changing the Video Output Format  p.76



The LCD monitor is turned off when the camera is connected to a TV.

If you intend to use the camera for a long time, use of the AC adapter is recommended. Refer to the operating manual for the equipment to which the camera is connected.

Viewing Images with Windows PC

Images recorded with the camera can be edited, printed using a PC with an USB cable and the included software (S-SW2).

About the included software

The included CD-ROM contains the following software:

- USB driver
- Image viewing software (ACDSee™ 3.1)

System environment

OS: Windows 98/2000/Me
CPU: Pentium or later recommended
Memory: 32MB or more
Hard disk space: 15MB or more
Standard equipped USB port

To view movie pictures on your PC, Direct X 8.0 and Media Player pre-installed on system, or QuickTime 3.0 or later are required.
For Windows Me, Media Player pre-installed on system, or QuickTime 3.0 or later is required.



Not compatible with Windows 95

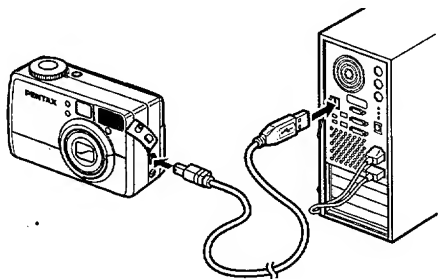
Installing the software

The procedures for installing the necessary software are explained.

Installing the USB driver

- 1 Turn on your PC.
- 2 Set the included CD-ROM in the CD-ROM drive.

- 3** Turn the camera off, and connect the PC and camera using a USB cable.



- 4** Turn the camera on.
The [Add New Hardware Wizard] screen will appear.
- 5** Click [Next].
- 6** Make sure that [Search for the best driver for your device [Recommended] is selected and click [Next].
- 7** Make sure that [CD-ROM drive] is checked and click [Next].
[PENTAX USB DISK Device] will appear.
- 8** Click [Next].
[Windows has finished installing the software that your new hardware device requires.] will appear.
- 9** Click [Finish].

Installing ACDSee™

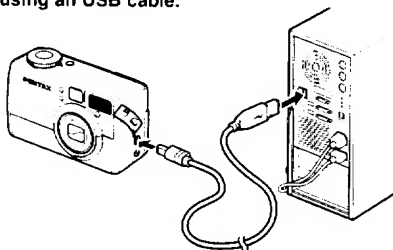
When installing ACDSee™, recorded images can be viewed on your PC.

- 1 Turn on your PC.
- 2 Set the CD-ROM in the CD-ROM drive.
- 3 Double click [My Computer].
- 4 Double click the [CD-ROM drive] icon.
- 5 Double click [English].
- 6 Double click [setup.exe].

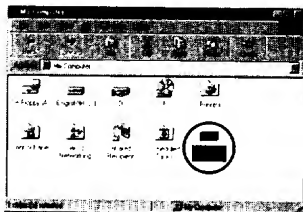
The Setup screen will appear. Follow the on-screen guidance and enter the registration information. When the installation is completed, restart Windows.

Connecting the camera and PC

- 1 Turn on your PC.
- 2 Turn the camera off and connect the PC and camera using a USB cable.



- 3 Turn on the camera.
The camera will be detected as [Removable Disk] in [My Computer].





Although images can be viewed and printed, image data is in the CF card of the camera. To save the image data in the CF card to another medium, refer to the instruction manual of your PC and move or copy files using Explorer, etc.

You can edit images on your PC after moving or copying files there.

Viewing images on your PC

- 1 Double click the [ACDSee™] icon on the desktop.


- 2 Select the image to view.

Camera images can be found in [My Computer] → [Removable Disk] → [Dcim] → [xxxxpentx] (xxx is a 3-digit numeral) folder.



You can also view movie pictures operating the above procedures.

Disconnecting the camera from your PC

- 1 Double click  (Hot Plug icon) on the lower right task bar tray of the desktop.

The [Remove Hardware] screen will appear.

- 2 Make sure [USB Device] is selected and click [Stop].
[Stop Hardware Device] screen will appear.

- 3 Make sure [USB Device] is selected and click [OK].
A message will appear.

- 4 Click [OK].

- 5 Disconnect the USB cable from your PC and camera.



For Windows 98/Me, there is no Hot Plug icon. When removing the camera, turn off the camera and disconnect the USB cable.

Viewing Images with Macintosh

Images recorded with the camera can be edited/printed using a Macintosh with an USB cable and the included software (S-SW2).

About the included software

The included CD-ROM contains the following software:

- USB driver
- Image viewing software (ACDSee™)

System environment

OS: Mac OS 8.6 or later (QuickTime 4.0 or later required)

CPU: PowerMac 266MHz or higher

Memory: 8MB or more

Hard disk space: 6MB or more

Standard equipped USB port

To view movie pictures on your Macintosh, QuickTime 4.0 or later pre-installed on system is required.

Installing the software

The procedures for installing the necessary software are explained.

Installing the USB driver

- 1 Turn on your Macintosh.
- 2 Set the included CD-ROM in the CD-ROM drive of your Macintosh.
- 3 Copy the following 2 files to the [Extensions] folder within the System folder.
PENTAX-USB Storage Driver
PENTAX-USB Storage Shim (E)
- 4 Restart your Macintosh.



Optio 430 is usable to USB mass storage class. For MacOS X and MacOS 9.x, there is no need to install the USB driver.

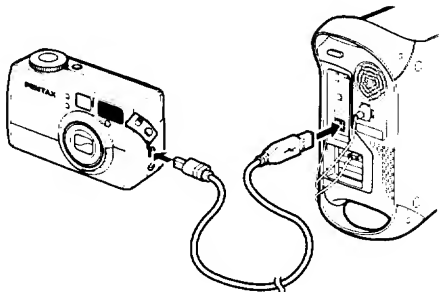
Installing ACDSee™

When installing ACDSee™, recorded images can be viewed on your Macintosh.

- 1 Turn on your Macintosh.
- 2 Set the included CD-ROM in the CD-ROM drive of your Macintosh.
- 3 Double click [English] on the CD-ROM (S-SW2).
- 4 Follow the on-screen guidance and enter the registration information and proceed with the installation.

Connecting the camera and your Macintosh

- 1 Turn on your Macintosh.
- 2 Turn off the camera and connect your Macintosh and camera using an USB cable.



- 3 Turn on the camera.

The camera will be detected as [untitled] on the desktop. The folder name can be changed as desired.



Although images can be viewed and printed, image data is in the CF card of the camera. To save the image data in the CF card to another medium, refer to the instruction manual of your Macintosh and move or copy files.

You can edit images on your Macintosh after moving or copying files there.

Viewing images on your Macintosh

- 1 Double click the [ACDSee™] folder on the hard drive.
- 2 Double click the [ACDSee™] program icon.
Camera images can be found in the [untitled] → [Dcim] → [xxxxpentx] (xxx is a 3-digit numeral) folder on the desktop.



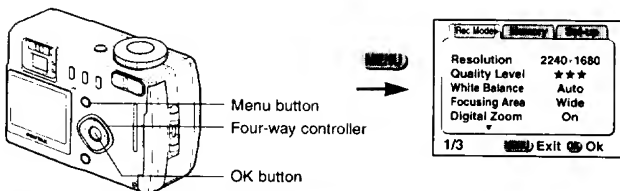
You can also view movie pictures operating the above procedures.

Disconnecting the camera from your Macintosh

- 1 Drag the [untitled] folder on the desktop to Trash.
- 2 Remove the USB cable from your Macintosh and camera.

Camera Settings

How to recall the [Set-up] menu



Formatting a CF Card

Formatting will delete all the data on the CF card.

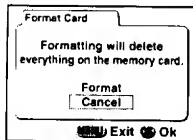
Caution:

- Do not open the CF card cover while the card is being formatted. The card may be damaged and become unusable.
- Formatting will delete protected data too.

Settings

- 1 Select [Format Card] on the [Set-up] menu.
- 2 Press the four-way controller (►). The Format screen will be displayed.
- 3 Select [Format] with the four-way controller (▲).
- 4 Press the OK button.

Formatting will start. When formatting is completed, the camera is ready to capture or play back images.

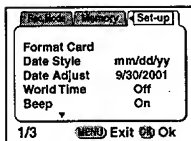




Twice (in Capture mode)



Once (in Playback mode)



Setting the Date Style

You can set the style in which the date is displayed on the camera. Choose [mm/dd/yy], [dd/mm/yy] or [yy/mm/dd].

- 1 Select [Date Style] on the [Set-up] menu.**
- 2 Use the four-way controller (◀ ▶) to change the date style.**
- 3 Press the OK button.**

The camera is ready to capture or play back images with the selected date style.



The time is set by [Date Adjust].

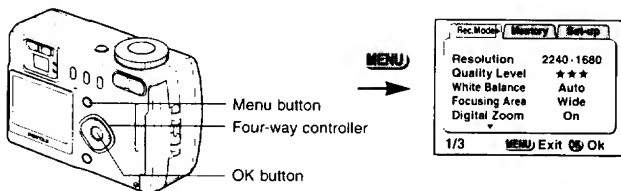
Changing the Date/Time

You can change the initial date and time settings.

- 1 Select [Date Adjust] on the [Set-up] menu.**
- 2 Press the four-way controller (▶).**
The date screen will be displayed.

See "Initial Settings" (p.16) for the setting procedure.

How to recall the [Set-up] menu



Setting the World Time

The city and time selected in "Initial Settings" (p.16) serve as the World Time setting.

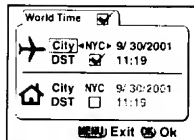
You can display the time in a city other than the Home Time city (World Time) when shooting or playing back.

1 Select [World Time] on the [Set-up] menu.

2 Press the four-way controller (▶).
The World Time screen will be displayed.

3 Switch ☒ (On) and ☐ (Off) with the four-way controller (◀▶).

- ☒ : The time in the country selected in World Time will be displayed.
- ☐ : The time in the country selected in Home Time will be displayed.



4 Press the four-way controller (▼).
The frame will move to [City].

5 Use the four-way controller (◀▶) to select the World Time city and press the four-way controller (▼).



Twice
(in Capture mode)



Once
(in Playback mode)



- 6** Select [DST] On or Off with the four-way controller (◀ ▶) and press the four-way controller (▼).
The frame will move to [City].
Use the four-way controller (◀ ▶) to change the Home Time city and DST setting.
- 7** Press the OK button.
The camera is ready to capture or play back images with the time in the selected city.



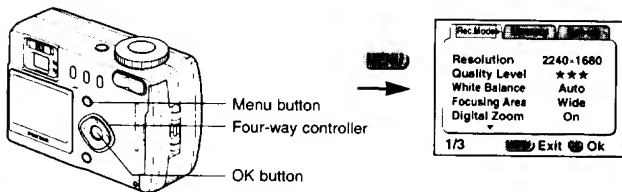
See p.81 for the list of cities and code names.

Setting the Beep

The beep sound can be turned on and off.

- 1** Select [Beep] on the [Set-up] menu.
- 2** Use the four-way controller (◀ ▶) to select On or Off.
- 3** Press the OK button.
The camera is ready to take or play back images.

How to recall the [Set-up] menu



Changing the Display Language

You can change the language in which the menus, error messages, etc. are displayed.

- 1 Select [Language] on the [Set-up] menu.
- 2 Use the four-way controller (◀ ▶) to change the language.
- 3 Press the OK button.

The camera is ready to take or play back images.

Changing the Video Output Format

You can select the output format (NTSC or PAL) for taking or playing back images on a TV monitor.

- 1 Select [Video Out] on the [Set-up] menu.
- 2 Use the four-way controller (◀ ▶) to change the video output format.
- 3 Press the OK button.

The camera is ready to take or play back images.

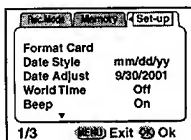


The appropriate format for the language specified in the initial settings is automatically set.

Twice
(in Capture mode)



Once
(in Playback mode)



6 times



Powersaving Function

You can set the LCD monitor to turn off automatically when no operation is performed for a fixed time.

- 1 Select [Sleep Timeout] on the [Set-up] menu.
- 2 Use the four-way controller (◀ ▶) to select [1min], [2min], [Off] or [30sec].
- 3 Press the OK button.

The camera is ready to take or play back images.



- This function will not work in Playback mode.
- This function is not available when playing back with the slideshow and using the USB cable.
- The [Sleep Timeout] will not appear in Playback mode. You can set this function in Capture mode.

Auto Power Off Function

You can set the camera to turn off automatically when no operation is performed for a fixed time in Capture mode.

- 1 Select [Auto Power Off] on the [Set-up] menu.
- 2 Use the four-way controller (◀ ▶) to select [3min], [5min] or [Off].
- 3 Press the OK button.

The camera is ready to take or play back images.



This function is not available when playing back with the slideshow and using the USB cable.

Setting the Brightness Level

You can set the brightness of the LCD monitor.

- 1 Select [Brightness Level] on the [Set-up] menu.
- 2 Use the four-way controller (◀ ▶) to select the brightness level, [1] to [7].
- 3 Press the OK button.

The camera is ready to take or play back images.

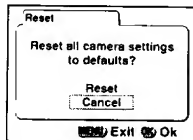
Resetting to Default Settings (Reset)

You can reset all the settings other than the date and time, language, home time, alarm, video output format and date style.

- 1 Select [Reset] on the [Set-up] menu.
- 2 Press the four-way controller button (▶).
The Reset screen will be displayed.
- 3 Use the four-way controller (▲) to select [Reset].

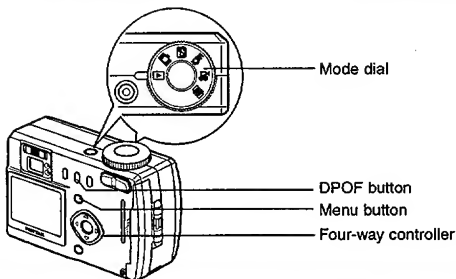
- 4 Press the OK button.

The camera is ready to take or play back images.



Sounding the Alarm at a Set Time

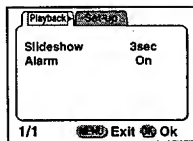
You can sound the alarm at a specified time and display a selected image.



Checking the Alarm

- 1 Press the Menu button in Play mode.**

The [Playback] menu will be displayed.



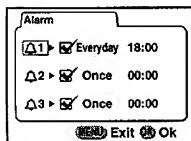
- 2 Press the four-way controller (▼) twice and select [Alarm].**

- 3 Press the four-way controller (▶).**

The alarm list will be displayed.
The alarms that are enabled will be indicated by a tick.

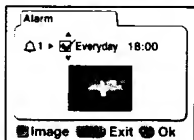
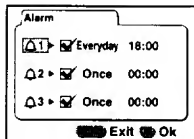
- 4 Press the OK button twice.**

If any alarms are enabled, the camera will be turned off and the alarms will be set.



Setting the Alarm

- 1 Press the Menu button in Play mode.**
The [Playback] menu will be displayed.
- 2 Use the four-way controller (▼) to select [Alarm].**
- 3 Press the four-way controller (▶).**
The alarm list will be displayed.
- 4 Use the four-way controller (▲▼) to select 1-3.**
- 5 Press the four-way controller (▶).**
The screen for setting the operating mode and time will be displayed.
Four-way controller (◀▶):
Selects the item
Four-way controller (▲▼):
Changes the figures



- 6 Press the DPOF button and select the image to be displayed when the alarm sounds.**

The images on the CF card will be displayed. (If there are no images on the CF card, no image will appear and no operation will be possible even if the DPOF button is pressed.)
Select an image with the four-way controller (◀▶) and press the OK button.

- 7 Press the OK button 3 times.**
Setting is completed and the camera is turned off.

Turning the Alarm Off

When the camera is turned off and the set time is reached, the alarm sounds for one minute.
When it finishes sounding, the power is automatically turned off.



You can turn the alarm off by pressing any button (except the Zoom button).



The alarm does not sound when the camera is turned on.

List of City Names

Refer to the following list of city and code names for setting the world time.







Code	City Names	Code	City Names
PPG	Pagopago	THR	Tehran
HNL	Honolulu	DXB	Dubai
ANC	Anchorage	KHI	Karachi
YVR	Vancouver	KBL	Kabul
SFO	San Francisco	MLE	Male
LAX	Los Angeles	DEL	Delhi
YYC	Calgary	CMB	Colombo
DEN	Denver	KTM	Kathmandu
MEX	Mexico City	DAC	Dacca
CHI	Chicago	RGN	Rangoon
MIA	Miami	BKK	Bangkok
YTO	Toronto	KUL	Kuala Lumpur
NYC	New York	VTE	Vientiane
SCL	San Diego	SIN	Singapore
CCS	Caracas	PNH	Phnom Penh
YHZ	Halifax	SGN	Ho Chi Minh
BUE	Buenos Aires	JKT	Jakarta
SAO	Sao Paulo	HKG	Hong Kong
RIO	Rio de Janeiro	PER	Perth
MAD	Madrid	BJS	Beijing
LON	London	SHA	Shanghai
PAR	Paris	MNL	Manila
MIL	Milan	TPE	Taipei
ROM	Rome	SEL	Seoul
BER	Berlin	ADL	Adelaide
JNB	Johannesburg	TYO	Tokyo
IST	Istanbul	GUM	Guam
CAI	Cairo	SYD	Sydney
JRS	Jerusalem	NOU	Noumea
MOW	Moscow	WLG	Wellington
JED	Jeddah	AKL	Auckland






Messages such as the following may be displayed on the LCD monitor during camera operation.




Compression error	Compression of the image you captured is in fail. Change the recorded pixels or quality levels, and take a picture again.
No base image found	You are trying to take a picture in Multiple Exposure mode when there is no base image or the saved images are all movie pictures.
Memory card full	The CF card memory is full and no more images can be saved. Insert a new CF card or delete unwanted images. (p.14, p.58) Change the quality/size and try again. (p.44, p.45)
No images in camera	There are no images on the CF card.
Camera can not display this image	You are trying to play back an image in a format not supported by this camera. You may be able to display it on another brand of camera or PC.
This image is protected	The image you are trying to delete is a protected image. (p.60)
No card in camera	There is no CF card in the camera. (p.14)
Battery depleted	The battery is exhausted. Charge the battery or replace with a charged battery. (p.10, p.11)
Battery depleted, the image is not stored.	The battery is exhausted. The image you just captured has not been saved. Charge the battery or replace with a charged battery. (p.10, p.11)
Memory card error	Shooting and playback are impossible due to a problem with the CF card. Try displaying on a PC.

This card is not formatted	The card you have inserted is unformatted or has been formatted on a PC or other device. (p.72)
Image recording...	The image is being recorded on the CF card.
DPOF settings recording...	The DPOF settings are being recorded on the CF card.
Movie recording...	The movie picture is being recorded on the CF card.
(Un)Protecting...	The image is being protected or unprotected.
Formatting...	The CF card is being formatted.
Deleting image...	The image is being deleted.
Alarm was set	The alarm has been enabled.
Image folder can not be created.	The largest file number is assigned to an image and no more images can be saved. Insert a new CF card or format the CF card.
This image can not be used to the base image.	You have selected an invalid image for the base image in Multiple Exposure mode.

Troubleshooting

Problem	Cause	Remedy
Power will not come on	Battery is not installed	Check battery is installed. If not, install battery.
	CF card cover is open	Close CF card cover.
	Battery is installed incorrectly	Check orientation of battery. Install with the label towards back of camera. (p.11)
	Battery power is low	Install charged battery or use AC adapter.
No image on the LCD monitor	LCD monitor is set to OFF	Press Display button to turn LCD monitor on. (p.30, 55)
	Camera is connected to TV	LCD monitor remains off while camera is connected to TV.
	Image is displayed but is hard to see	Image on LCD monitor may be hard to see when taking pictures outside in sunlight.
Shutter release button will not release	Camera is set to Play mode	Set mode dial to      or  .
	Flash is charging	When flash lamp blinks red, flash is charging and no pictures can be taken. Lamp lights red when charging is completed.
	No available space on CF card	Insert CF card with available space or delete unwanted images. (p.14, 58)
	Recording	Wait until recording is finished.

Problem	Cause	Remedy
Subject is not in focus	Subject difficult to focus on	Subjects difficult to focus on using autofocus: objects with little contrast (blue sky, white walls, etc.), dark objects, finely patterned objects, fast-moving objects, scenery through window or net, etc. Lock focus on another object located at same distance (press shutter release button halfway), then aim at target and press shutter release button fully.
	Subject is not in focusing area	Position subject in square frame (focusing area) in middle of LCD monitor. If the subject is outside the focusing area, aim the camera at the subject and lock focus (press shutter release button halfway), then compose picture and press the shutter release button fully.
	Subject is too close	Set focus mode on  . (p.41)
	Focus mode is set on 	Normal pictures will be out of focus if taken with focus mode set on  .
	Focus mode is set on manual	If using manual focus, adjust focus using four-way controller ( ). (p.41)
Subject is not clear in viewfinder	Dioptr is not correctly adjusted	Camera viewfinder is not correctly adjusted for optimum clarity. Adjust with diopter adjustment lever. (p.39)

Problem	Cause	Remedy
Picture is dark	Subject is too far away	Picture becomes dark if subject is too far away. Take picture within range of flash.
	Background is dark	When taking a picture of a person against dark background, such as night scene, the person may appear dark if the flash does not reach background even with correct exposure. Set to  mode to ensure both person and background are clear. (p.31)
Flash does not fire	Flash mode is set to Off	Set to Auto or  . (p.43)
	The Capture mode is set to  , continuous shooting, or Infinity-landscape mode.	Flash will not fire in these modes.

Main Specifications

Type	Compact-type digital still camera with built-in zoom lens autofocus, auto exposure and auto flash
Effective pixels	4.0 megapixel.
Sensor	4.13 megapixel (total pixels). 1/1.8 inch interline transfer CCD with a primary color filter.
Color Depth	10 bit × 3 colors.
Recorded Pixels	Still – 2240 × 1680 pixels, 1120 × 840 pixels, 640 × 480 pixels. Movie – 320 × 240 pixels.
Sensitivity	Auto, fixed (equivalent to ISO 100, 200).
File Formats	Still – JPEG (Exif 2.1), DCF, DPOF. Movie – AVI (Open DML Motion JPEG), 15fps.
Quality Levels	"Good", "Better", "Best".
Storage Media	CompactFlash (CF) card Type I
Image Storage Capacity	Exposure capacity when using 16 MB CF card

Quality levels Recorded pixels	Best	Better	Good
2240 × 1680	Approx. 5	Approx. 11	Approx. 16
1120 × 840	Approx. 22	Approx. 32	Approx. 64
640 × 480	Approx. 64	Approx. 106	Approx. 200

Lens	Pentax power zoom 7.6 mm - 22.8 mm (Equivalent to 37.5mm - 112.5 mm in 35 mm format) F2.6 - F4.8, 7 elements in 6 groups (2 dual-sided aspherical elements)
Digital Zoom	1x – 2x.
Focusing System	
Type	TTL contrast detection autofocus system. Manual focus / Infinity-landscape mode available.
Focusing Areas	7-point autofocus and spot.
Focusing Range	Autofocus: Normal 0.4 m (1.31 ft) to infinity. Macro 0.14 m (0.46 ft) to 0.5 m (1.64 ft). Manual focus: 0.14 m (0.46 ft) to infinity.

Exposure Control	
Metering System	TTL metering. Choice of Multi-segment metering, Center-weighted metering and Spot metering.
Exposure Modes	Standard, Night Scene, Metered Manual, Movie, Multiple Exposure.
Exposure Compensation	± 2 EV (1/3 steps).
Movie	Shooting time: approx. 1 sec. - 30 sec.
Shutter	Programmed AE electronic lens shutter with CCD electronic shutter. Shutter speed: approx. 1/2000 sec. to 2 sec.
Drive Modes	One shot, Continuous, Self-timer and Remote control.
Flash	Built-in series-control auto flash. Automatic discharge under low lighting condition in auto modes. Flash-on and flash-off modes. "Red-eye" reduction function employs a single discharge.
Flash effective range	Approx. 0.14 m (0.46 ft) - 2.8 m (9.2 ft) at 7.6 mm (ISO: AUTO) Approx. 0.4 m (1.31 ft) - 1.6 m (5.2 ft) at 22.8 mm (ISO: AUTO)
White Balance	Auto, Daylight, Shade, Tungsten Light, Fluorescent Light and Manual setting.
Color Modes	Color, black & white and sepia.
Optical Viewfinder	Actual-image zoom viewfinder with diopter adjustment from -3 m ⁻¹ to +1 m ⁻¹ .
LCD Monitor	1.6 inch. TFT color LCD.
LCD Functions	Nine-image and 1x - 4x magnification available in Playback mode.
Interfaces	TV output terminal, USB terminal and DC input terminal.
Video Output	Video output compatible with NTSC and PAL formats.
Power Sources	Lithium-ion (rechargeable) battery allows 130 shots to be taken with one charge*. Optional AC adapter is also available. *According to tests conducted in-house by Pentax. Maximum charge takes approximately 120 minutes.
Dimensions	92 (W) \times 59 (H) \times 31 (D) mm (D: max 34.5 mm) (3.6 \times 2.3 \times 1.2/1.4 inches).
Weight	240 g (8.5 oz.) loaded and ready. 205 g (7.2 oz.) without battery and CF card.

WARRANTY POLICY

All Pentax cameras purchased through authorized bona fide photographic distribution channels are guaranteed against defects of material or workmanship for a period of twelve months from date of purchase. Service will be rendered, and defective parts will be replaced without cost to you within that period, provided the equipment does not show evidence of impact, sand or liquid damage, mishandling, tampering, battery or chemical corrosion, operation contrary to operating instructions, or modification by an unauthorized repair shop. The manufacturer or its authorized representatives shall not be liable for any repair or alterations except those made with its written consent and shall not be liable for damages from delay or loss of use or from other indirect or consequential damages of any kind, whether caused by defective material or workmanship or otherwise; and it is expressly agreed that the liability of the manufacturer or its representatives under all guarantees or warranties, whether expressed or implied, is strictly limited to the replacement of parts as hereinbefore provided. No refunds will be made on repairs by non-authorized Pentax service facilities.

Procedure During 12-month Warranty Period

Any Pentax which proves defective during the 12-month warranty period should be returned to the dealer from whom you purchased the equipment or to the manufacturer. If there is no representatives of the manufacturer in your country, send the equipment to the manufacturer, with postage prepaid. In this case, it will take a considerable length of time before the equipment can be returned to you owing to the complicated customs procedures required. If the equipment is covered by warranty, repairs will be made and parts replaced free of charge, and the equipment will be returned to you upon completion of servicing. If the equipment is not covered by warranty, regular charges of the manufacturer or of its representatives will apply. Shipping charges are to be borne by the owner. If your Pentax was purchased outside of the country where you wish to have it serviced during the warranty period, regular handling and servicing fees may be charged by the manufacturer's representatives in that country. Notwithstanding this, your Pentax returned to the manufacturer will be serviced free of charge according to this procedure and warranty policy. In any case, however, shipping charges and customs clearance fees to be borne by the sender. To prove the date of your purchase when required, please keep the receipt or bills covering the purchase of your equipment for at least a year. Before sending your equipment for servicing, please make sure that you are sending it to the manufacturer's authorized representatives or their approved repair shops, unless you are sending it directly to the manufacturer. Always obtain a quotation for the service charge, and only after you accept the quoted service charge, instruct the service station to proceed with the servicing.

The local warranty policies available from Pentax distributors in some countries can supersede this warranty policy. Therefore, we recommend that you review the warranty card supplied with your product at the time of purchase, or contact the PENTAX distributor in your country for more information and to receive a copy of the warranty policy.

For customers in the USA

STATEMENT OF FCC COMPLIANCE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- * Consult the dealer or an experienced radio/TV technician for help.

For customers in Canada

This Class B digital apparatus meets all requirements of the Canadian Interference - Causing Equipment Regulations.

Pour les utilisateurs au Canada

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.



The CE Mark is a Directive conformity mark of the European Community.

MEMO



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